REMARKS

Claims 1-28 are currently pending. The Examiner has rejected claims 1-28 as being unpatentable over U.S. Patent No. 5,904,743 to Jensen in view of U.S. Patent No. 2,537,205 to Burmeister or U.S. Patent No. 2,467,503 to Scriven. The following remarks are considered by applicants to overcome each of the Examiner's outstanding rejections. An early Notice of Allowance is therefore requested.

Claim 1

The determination of obviousness rests on whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. In determining obviousness, four factors should be weighed: (1) the scope and content of the prior art, (2) the differences between the art and the claims at issue, (3) the level of ordinary skill in the art, and (4) whatever objective evidence may be present. Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. The Examiner carries the burden under 35 U.S.C. § 103 to establish a prima facie case of obviousness and must show that the references relied on teach or suggest all of the limitations of the claims.

The examiner contends that

"Burmeister discloses an air cleaner which houses a filter bag with a lid wherein the lip ... is located on the edge of body and comprises a first surface being capable of resting on the surface of edge of the housing and second surface extending above the housing and the sealing material located on the first and second surfaces..."

In particular, the Examiner points to element 18 in Fig. 2 and Col. 2, Lines 19-36 for support for this position. However, this misconstrues the teaching of Burmeister.

As is shown in Figure 2 of Burmeister, horizontal portion 15 of disk 12 has only its surface capable of resting on the housing in contact with gasket 18. The surface of horizontal portion 15 extending above the housing is in direct contact with the cap 3. There is no gasket or sealing material between horizontal portion 15 and cap 3, which would correspond to the second surface. Included in Claim 1 is a "sealing material located at said first and second surfaces to prevent fluids from passing between said lip and the housing and between said lip and the lid." (emphasis added) Thus, this claim language is not disclosed, suggested or taught in Burmeister.

Neither of the other two references relied upon by the Examiner disclose, suggest or teach this claim language. Jensen discloses an "L" shaped gasket 12 positioned between ligament 16 and thimble 7. Jensen, Col. 3 Line 60 – Col. 4 Line 7. As such, Jensen discloses a sealing material only on the lower surface of thimble 7 capable of resting on the

ligament 16. Scriven discloses no sealing material whatsoever. It is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations in Claim 1, in particular the claim limit that there is a "sealing material located at said first and second surfaces...."

In addition, while obviousness may be found by combining references, absent a suggestion to combine the references such combination is inappropriate. It is insufficient that the prior art discloses the components of the claims sought to be patented. A teaching, suggestion or incentive to make the combination is required for the combination of the art to demonstrate obviousness.

Scriven does not disclose, suggest or teach the use of any sealing material. Jensen's gasket 12 creates a seal by thermal expansion. The seal in Burmeister is different as it is formed by the positive pressure exerted by the closure cap 3. This difference in the manner in which the seal is formed would be critical to someone skilled in the art as there are inherent problems with a positive pressure seal that would only be exacerbated if the sealing material were to move due to thermal expansion.

These problems are disclosed in the current application specification: "In addition, the plastic inlet flange can be subject to compression set or creep, especially at high temperatures. Thus, these designs should not be considered to create a dependable seal."

"Other prior art designs provide a separate sealing gasket made of softer material inserted between the inlet flange and the closed lid. These designs can be subject to leakage due to misalignment of the sealing gasket between the lid and the inlet flange when placing the gasket on the inlet flange. Such misalignment can also be caused by the effects of internal pressure in the housing that can force the sealing gasket to shift out of position between the lid and inlet flange." Application, P. 3 Lns. 1-12.

As discussed above, the prior art discloses that movement of the gasket in a positive pressure seal would create leakage and that the seal is further weakened by creep of the plastic inlet flange at high temperatures. Jensen discloses a gasket that expands as temperature increases in order to improve the seal. Therefore, anyone skilled in the art would read the gasket in Jensen, to further decrease the efficiency of a positive pressure seal, such as that disclosed in Burmeister or Scriven, as temperature increases. Thus, Jensen teaches away from the use of a positive pressure seal such as that disclosed in either Burmeister or Scriven. Consequently, there is no motivation to combine the patents to demonstrate obviousness.

Based on all the above remarks Applicants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness. Furthermore, Applicants respectfully submit that there is no motivation to combine the three cited patents to

demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 1.

Claim 2

Claim 2 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 2. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 2.

Claim 3

Claim 3 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 3. In addition, Claim 3 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is not disclosed, suggested or taught in Jensen, Burmeister, or Scriven. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 3. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 3.

Claim 4

Claim 4 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 4. In addition, Claim 4 specifies that the sealing material is an integral part of the lip. Both Jensen and Burmeister disclose merely a gasket. Gaskets are removable items and neither Jensen nor Burmeister specify otherwise. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 4. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 4.

Claim 5

Claim 5 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 5. In addition, Claim 5 specifies that the sealing material is mechanically affixed to said lip. Neither Jensen nor Burmeister disclose their gaskets to be mechanically affixed. In fact, Burmeister specifically states that the gasket is "shaped to fit snugly in the groove

6a...." Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 5. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 5.

Claim 6

Claim 6 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 6. In addition, Claim 6 specifies that a portion of said sealing material extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a seal against said lid due to internal pressure in the filtering system. The concept of extending the sealing material parallel to the lid is not disclosed, suggested or taught in any of the three patents cited in the Examiner's 35 U.S.C. § 103 obviousness rejection. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 6.

Furthermore, Jensen, Burmeister, and Scriven never discuss the internal pressure of their filtering systems, let alone indicate that the internal pressure can be used to assist in sealing the system. Consequently, none of the three cited patents presents a motivation to combine them in such a way as to increase the quality of the seal by utilizing the internal pressure of the filter system. Thus, the three cited patents may not be combined to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 6.

Claim 7

Claim 7 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 7. In addition, Claim 7 specifies that said sealing material will be compressed by the lid when the lid is covering the housing. Neither Jensen nor Burmeister disclose a sealing material located adjacent to a lid, let alone a compression of such a sealing material by a lid. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 7. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 7.

Claim 8

Claim 8 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 8. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 8.

Claim 9

Claim 9 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 9. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 9.

Claim₁₀

Claim 10 is dependent upon Claim 2. As Claim 2 is allowable, so must be Claim 10. In addition, Claim 10 specifies that the sealing material is an integral part of the lip. Both Jensen and Burmeister disclose merely a gasket. Gaskets are removable items and neither Jensen not Burmeister specify otherwise. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 10. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 10.

Claim 11

Claim 11 is dependent upon Claim 2. As Claim 2 is allowable, so must be Claim 11. In addition, Claim 11 specifies that a portion of said sealing extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a pressure seal against the lid. Jensen, Burmeister, and Scriven never discuss such a pressure seal. Neither is the concept of extending the sealing material parallel to the lid disclosed, suggested or taught in any of the three patents cited. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 12. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 11.

Claim 12

Claim 12 is dependent upon Claim 4. As Claim 4 is allowable, so must be Claim 12. In addition, Claim 12 specifies that a portion of said sealing extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a pressure seal against said lid. Jensen, Burmeister, and Scriven never discuss such a pressure seal. Neither is the concept of extending the sealing material parallel to the lid disclosed, suggested or taught in any of the three patents cited. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 12. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 12.

Claim 13

Claim 13 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 13. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 13.

Claim 14

Included in Claim 14 is a "first lip portion extending away from said body in an upward and outward direction...", a "second lip portion located at the end of said first lip portion, said second lip portion extending away from said first lip portion in a downward and outward direction; and sealing material located at the end of said first lip portion and the end of said second lip portion."

As discussed in the remarks for Claim 1, Burmeister does not teach a sealing material on the surface of the horizontal portion 15 adjacent to closure cap 3, which is akin to the first lip portion of Claim 14. Jensen discloses an "L" shaped gasket 12 positioned between the ligament 16 and the thimble 7. Jensen, Col. 3 Ln. 60 – Col. 4 Ln. 7. As such, Jensen discloses a sealing material only on the surface of the thimble 7 capable of resting on the ligament 16. Scriven discloses no sealing material whatsoever.

Furthermore, Jensen, Burmeister, and Scriven fail to disclose or suggest the upward and outward configuration of the first lip portion and the downward and outward configuration of the second lip portion of Claim 14.

Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 14. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 14.

Claim 15

Claim 15 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 15. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 15.

Claim 16

Claim 16 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 16. In addition, Claim 16 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is never mentioned in Jensen, Burmeister, or Scriven. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 16. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 16.

Claim 17

Claim 17 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 17. In addition, Claim 17 specifies that the sealing material is mechanically affixed to said lip. Neither Jensen nor Burmeister disclose their gaskets to be mechanically affixed. In fact, Burmeister specifically states that the gasket is "shaped to fit snugly in the groove 6a...." Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 17. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 17.

Claim 18

Claim 18 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 18. In addition, Claim 18 specifies that the sealing material is an integral part of the lip. Both Jensen and Burmeister disclose merely a gasket. Gaskets are removable items and neither Jensen not Burmeister specify otherwise. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 18. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 18.

Claim 19

Claim 19 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 19. In addition, Claim 19 specifies that the sealing material extends away from the end of said first portion in an inwardly direction. The concept of extending the sealing material inwardly is not disclosed, suggested or taught in Jensen, Burmeister, or Scriven. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 19. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 19.

Claim 20

Claim 20 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 20. In addition, Claim 20 specifies that the location where said second portion extends from said first portion comprises of a flat surface. Jensen, Burmeister, and Scriven fail to disclose or suggest the first lip portion and second lip portion configuration of Claim 14, let alone the flat surface configuration of Claim 20. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 20. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 20.

Claim 21

Claim 21 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 15. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 21.

Claim 22

Included in Claim 22 is a "sealing material located where said lip contacts said housing and said lid." As discussed in the remarks for Claim 1, Burmeister does not teach a sealing material on the surface of horizontal portion 15 of disk 12 that contacts the cap 3. Jensen discloses an "L" shaped gasket 12 positioned between the ligament and the thimble 7. Jensen, Col. 3 Ln. 60 – Col. 4 Ln. 7. As such, Jensen discloses a sealing material only on the surface of the thimble 7 capable of resting on the ligament 16. Scriven discloses no sealing material whatsoever. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 22. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 22.

Claim 23

Claim 23 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 23. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 23.

Claim 24

Claim 24 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 24. In addition, Claim 24 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is not disclosed, suggested or taught in Jensen, Burmeister, or Scriven. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 24. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 24.

Claim 25

Claim 25 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 25. In addition, Claim 25 specifies that the sealing material is an integral part of the lip. Both Jensen and Burmeister disclose merely a gasket. Gaskets are removable items and neither Jensen not Burmeister specify otherwise. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 25. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 25.

Claim 26

Claim 26 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 26. In addition, Claim 26 specifies that the sealing material is mechanically affixed to said lip. Neither Jensen nor Burmeister disclose their gaskets to be mechanically affixed. In fact, Burmeister specifically states that the gasket is "shaped to fit snugly in the groove 6a...." Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 26. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 26.

Claim 27

Claim 27 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 27. In addition, Claim 27 specifies that said sealing extends away from said lip in a direction parallel to said lid and in contact with said lid to create a pressure seal against said lid. Jensen, Burmeister, and Scriven never discuss a such pressure seal. Neither is the concept of extending the sealing material parallel to the lid disclosed, suggested or taught in any of the three patents cited. Scriven never even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 27. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 27.

Claim 28

Claim 28 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 28. Furthermore, based on the remarks for Claim 1, there is no motivation to combine the three cited patents to demonstrate obviousness. It is therefore respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejection to Claim 28.

As related above in the discussions for each individual claim, it is respectfully asserted that the Examiner has failed to show that the references relied upon teach or suggest all of the limitations of the claims. It is also respectfully asserted that the Examiner has failed to display that there is any motivation, other than hindsight itself, for combining the references in the manner suggested by the Examiner. Therefore, Applicants respectfully submit that the Examiner has not satisfied the Examiner's burden of establishing a prima facie case of obviousness under 35 U.S.C. § 103.

Based upon the above remarks, Applicants respectfully request reconsideration of this application and its early allowance. Should the Examiner feel that a telephone conference with Applicants' attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,

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